

عنوان مقاله:

Detection of laser generated ultrasonic waves in ablation regime by plane and confocal Fabry-Perot interferometers: Simulation

محل انتشار:

سومین کنفرانس بین المللی آزمونهای غیرمخرب ایران (سال: 1394)

تعداد صفحات اصل مقاله: 11

نویسندگان:

Vahid Haghighi - Department of Physics, University of Isfahan, Isfahan, Iran

Sedighe Malekmohamadi - Department of Physics, University of Isfahan, Isfahan, Iran

خلاصه مقاله:

Generation and detection of ultrasonic waves by laser in ablation regimehave been simulated. Ultrasonic wave has been simulated by the ablation regime. By high laser power density, the ultrasonic pulse shape is of Heaviside step function shape. Interferometer is one of the famous method to detect ultrasonic wave. We have simulated received waves by both plane and confocal Fabry-Perot interferometers. In this case the confocal -FabryPerot interferometer would have comparable sensitivity and a better frequency response. This configuration would be more compact and more practical

کلمات کلیدی:

Laser ultrasonics, Ablation, Pulsed laser, Fabry-Perot interferometer

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/910473

